

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/899,265	07/06/2001	Nevein T. Sultan	9-13528-170US	3921
7590 01/13/2006			EXAMINER	
Swabey Ogilvy Renault			REFAI, RAMSEY	
Suite 1600 1981 McGill Co			ART UNIT	PAPER NUMBER
Montreal, QC H3A 2Y3 CANADA			2152	
			DATE MAILED: 01/13/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary Application No. 09/899,265 Examiner Ramsey Refai The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1,138(a). In no event, however, may a reply be timely filled after Six (6) MONTHS from the analing date of this communication. - If INO period for reply is specified above, the maximum statutory period will apply and will expire SiX (6) MONTHS from the sting date of this communication. - Failure to reply which the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filled on 26 October 2005. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-8.10-15.17-25 and 27-31 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers	
Examiner Ramsey Refai	
Ramsey Refai	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after 5IX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 26 October 2005. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-8.10-15.17-25 and 27-31 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 26 October 2005. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-8.10-15.17-25 and 27-31 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8) Claim(s) is/are objected to.	
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 26 October 2005. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-8,10-15,17-25 and 27-31 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 1-8,10-15,17-25 and 27-31 is/are rejected. Claim(s) is/are objected to. Claim(s) is/are objected to.	
1) Responsive to communication(s) filed on 26 October 2005. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-8, 10-15, 17-25 and 27-31 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-8, 10-15, 17-25 and 27-31 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.	
 2a)	
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☐ Claim(s) 1-8,10-15,17-25 and 27-31 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-8,10-15,17-25 and 27-31 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.	
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-8,10-15,17-25 and 27-31 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-8,10-15,17-25 and 27-31 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.	
4) Claim(s) 1-8,10-15,17-25 and 27-31 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-8,10-15,17-25 and 27-31 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.	
4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1-8,10-15,17-25 and 27-31</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.	
6)⊠ Claim(s) 1-8,10-15,17-25 and 27-31 is/are rejected. 7)□ Claim(s) is/are objected to. 8)□ Claim(s) are subject to restriction and/or election requirement.	
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.	
8) Claim(s) are subject to restriction and/or election requirement.	
Application Papers	
· · · · · · · · · · · · · · · · · · ·	
9) The specification is objected to by the Examiner.	
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.	
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119	
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:	
1.☐ Certified copies of the priority documents have been received.	
2. Certified copies of the priority documents have been received in Application No	
3. Copies of the certified copies of the priority documents have been received in this National Stage	
application from the International Bureau (PCT Rule 17.2(a)).	
* See the attached detailed Office action for a list of the certified copies not received.	
Attachment(s)	
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date Paper No(s)/Mail Date Paper No(s)/Mail Date	

Art Unit: 2152

DETAILED ACTION

Response to Amendment

Responsive to Amendment received on October 26, 2005. Claims 1, 12, and 25 have been amended. Claims 1-8, 10-15, 17-25, and 27-31 remain pending further examination.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. <u>Claims 1-6, 10, 12-15, 17-22, 25, and 28-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Tappan (U.S. Patent No. 6,473,421).</u>
- As per claim 1, Tappan teaches a method comprising steps of:
 asserting a route tag in respect of a link state advertisement (LSA) message (column 7,
 lines 14 67 and column 5, lines 5-15); and

controlling propagation of the LSA (column 7, lines 14 – 67 and column 5, lines 5-15) using a forwarding policy having a match criteria corresponding to the asserted route tag wherein the forwarding policy is implemented on a per-router basis, such that an area border router (ABR) of the data network has a respective forwarding policy which differs from that of

Art Unit: 2152

at least one other area border router (ABR) of the data network (Figure 9, column 1, lines 40-47, column 5, lines 37-40, column 8, lines 39-55).

- 4. As per claim 2, Tappan teaches the data network is an Open Shortest Path first (OSPF) network (abstract).
- 5. As per claim 3, Tappan teaches a route tag comprises one of: an internal route tag associated with an address located within an autonomous system of the data network; and an external route tag associated with an address located outside the autonomous system (Figure 3).
- 6. As per claim 4, Tappan teaches the step of asserting a route tag comprises steps of: setting a route tag value respecting the LSA; and inserting the route tag value into a predetermined field of the LSA (column 7, lines 14 67 and column 5, lines 5-15)..
- 7. As per claim 5, Tappan teaches wherein the route tag value is set by a policy having a match criteria corresponding to a predetermined attribute of the LSA (column 1, line 40 column 2, lines 50 and column 6, lines 5-50).
- 8. As per claim 6, Tappan teaches wherein the predetermined attribute comprises any one or more of: a source address; a source area; a destination address; and a destination area (column 2, lines 3 50 and Figure 3).

Art Unit: 2152

9. As per claim 10, Tappan teaches the forwarding policy corresponds to one of: a pass decision, in which the LSA is forwarded to a downstream link; and a discard decision, in which the LSA is discarded without forwarding (column 1, lines 41-47).

- 10. As per claim 14, Tappan teaches an autonomous system border router, and an area border router (abstract).
- 11. As per claims 12-13, 15, 17-22, 25, 28, and 29, these claims contain similar limitations as claims 1-6, and 9-10 above, therefore are rejected under the same rationale.

Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claims 7-8, 23-24, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tappan (U.S. Patent No. 6,473,421) as per claim 1 above, in view of AAPA (Applicant Admitted Prior Art).
- 14. As per claim 7, Tappan teaches the step of inserting the route tag comprises a step of inserting the route tag value into an external route tag field of the LSA (column 5, lines 5 15).

Art Unit: 2152

15. Tappan fails to teach the use of Type-5 LSA.

16. However, AAPA teaches the use of Type-5 LSA (paragraph [0007]). It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine the teachings of Tappan and AAPA because AAPA use of Type-5 LSA in Tappan's system would allow for advertisements to describe routes to destinations external to the Autonomous System.

- 17. As per claim 8, Tappan teaches the step of inserting the route tag comprises a step of inserting the route tag value into an internal route tag field (column 1, lines, 40-56 and column 2, lines 10-50).
- 18. Tappan fails to teach the use of Type-3 LSA.
- 19. However, AAPA teaches the use of Type-3 LSA (paragraph [0008]). It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine the teachings of Tappan and AAPA because AAPA use of Type-3 LSA in Tappan's system would allow advertisements to describe routes to networks.
- 20. As per claims 23-24 and 30-31, these claims contain similar limitations as claims 7-8 above, therefore are rejected under the same rationale.
- 21. Claims 11, 18, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over

 Tappan (U.S. Patent No. 6,473,421) as per claim 1 above, in view of AAPA (Applicant Admitted

 Prior Art) and in further view of Soloway et al (U.S. Patent No. 5,265,092).

Art Unit: 2152

22. As per claim 11, Tappan teaches the use LSA (abstract) and a forwarding table (policy) (column 2, lines 10-50).

- 23. Tappan fails to teach forwarding table-using information contained in the LSA as either one of: an inclusion route; and an exclusion route.
- 24. However AAPA teaches a forwarding table that contains inclusion routes (paragraph [0010]). AAPA fails to teach the use of exclusion routes in forwarding tables.
- 25. However, Soloway et al teaches using exclusion routes in forwarding tables (column 6, lines 35-60; when the switch detects, via LSP (link state packet), that the route/link is changed/down/affected, it stores the changed/down/affected route/link information in the forwarded table). It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine the teachings of Tappan, AAPA, and Soloway et al because AAPA's use of inclusion routes in forwarding tables and Soloway et al's use of exclusion routes in forwarding tables in Tappan's system would provide for a way to control traffic flow within networks by using a forwarding policy that contains inclusion and exclusion routes which allow an ASBR to discard or pass selected packets according to these routes.
- 26. As per claims 18 and 27, these claims contain similar limitations as claim 11 above, therefore are rejected under the same rationale.

Response to Arguments

27. Applicant's arguments filed have been fully considered but they are not persuasive.

Application/Control Number: 09/899,265

Art Unit: 2152

• In the remarks, the Applicant argues in substance that Tappan fails to teach or suggest that an area border router (ABR) of the data network has a respective forwarding policy, which differs from that of at least one other area border router (ABR) of the data network.

Page 7

• In light of further review of the Tappan reference and the remarks made by the Applicant, the rejection in view of Tappan is maintained. The Tappan reference does teach the claimed limitations (Figure 9, column 1, lines 40-47, column 5, lines 37-40, column 8, lines 39-55). In page 9 of the Remarks, the Applicant has admitted that "Tappan Fig. 9 does provide a 'forwarding policy' of sorts". Tappan also teaches that ABRs contain polices which differ from router to router (column 1, lines 30-57). Although the Applicant argues that the forwarding policies of Tappan and the Applicant's invention differ, it is noted that the features upon which applicant relies (i.e. the differences between the Tappan forwarding policy and that of the Applicant's) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2152

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RR January 4, 2006

Ramsey Refai Examiner Art Unit 2152

BUNJOB JAROENCHONWANT